## Columbia and Snake river dams prevent \$1.53 billion in damages

Contact: Clare Perry

Portland, Ore. - - Flood control operations in the Columbia River Basin this spring cut river stages by two to fourteen feet throughout the region, preventing more than \$1.53 billion in damages to the Lower Columbia area below Bonneville Dam.

Without the Columbia and Snake River dams, Vancouver harbor, which reached 19.1 feet in mid-June, would have topped 28.3 feet, about a foot higher than seen in the great flood of February 1996! Flood stage at the Vancouver gage is 16.0 feet.

"Corps management of the reservoir system helped prevent a disastrous flood on the lower river," said Mike Thorne, Executive Director for the Port of Portland. "They did a great job in providing flood control protection while managing the river system for competing interests."

With record runoff and heavy snowpack throughout the Columbia Basin, Corps reservoir regulators used the region's nine major storage dams to protect life and property and minimize impacts to fish, navigation, and irrigation.

Flows past Portland would have topped 879,000 cubic feet per second (cfs) causing widespread flooding and significant damage without regulation. Instead, the Corps was able to hold the river to peak flows of 571,000 cfs with minimal impacts during one of the highest water years on record. Flood stage in the Lower Columbia is reached when flows at The Dalles exceed 450,000 cfs.

At Bonner's Ferry, Idaho, the Kootenai River would have crested nearly 15 feet above flood stage without the storage capabilities of Libby Dam in northwestern Montana. Peak flows at Lower Granite, Wash., were reduced by nearly a third by regulating releases out of Dworshak Dam on Idaho's Clearwater River and Brownlee Dam (Idaho Power) on the Snake.

At The Dalles, Ore., a key flood control index point 80 miles east of Portland, more than 96 million acre feet of water passed the dam between April and July, about 152 percent of normal volume. Unregulated April through August runoff at The Dalles is projected to be 134 million acre feet, the fifth highest volume since seasonal runoff records began in 1879.

Reservoirs behind Columbia system dams can hold only 30 million acre feet of water, less than 15 percent of the Columbia Basin's average annual runoff. The rest is passed through the dams and powerhouses or over spillways. In contrast, the Missouri and Colorado rivers have storage capabilities two to four times their yearly runoff, respectively.